

WHAT IS CLAIMED IS:

1. A network system comprising computers, a plurality of storage devices for managing the volumes connected to said computers through a SAN (storage area network), and a management computer connected to said computers and said storage devices, wherein:

    said storage device has a control unit for controlling the input and output to and from the volumes based on volume access control information for specifying the computers that can access the volumes; and

    said management computer includes an interface for receiving a notice of fault in the volume and said volume access control information from said plurality of storage devices, and a control unit for executing a procedure for notifying the fault of said volume to said computers which are permitted to access said volumes based on said volume access control information.

2. A recording medium recording a management program to be executed by a management computer that is connected to computers and to a plurality of storage devices for managing the volumes connected to said computers through a SAN (storage area network), said recording medium being so designed as can be read by said management computer and recording a management program for executing:

a procedure for receiving a notice of fault in the volume from said storage devices;

a procedure for receiving volume access control information from said plurality of storage devices for specifying said computers that can access said volumes; and

a procedure for notifying the fault in the volume to said computers that are permitted to access the volumes based on said volume access control information.

3. A recording medium according to claim 2, wherein a management program is recorded to execute:

a procedure for receiving passage control information from the connection device having a control unit for controlling the input and output of data among a plurality of interfaces connected to said computers and to said storage devices based on said passage control information defining the input and output of data among said interfaces; and

a procedure for notifying a fault in the volume to said computers permitted to access the volumes based on said passage control information and said volume access control information, instead of executing said procedure for notifying the fault.

4. A recording medium according to claim 2, wherein a management program is recorded to execute a procedure for notifying a fault in the volume to the computers permitted to access the volumes based on said volume access control

information and managing person control information for specifying said volumes or said computers permitting the management for each of the management IDs for identifying the managing person or the management computer, instead of executing said procedure for notifying the fault.

5. A recording medium according to claim 2, wherein a management program is recorded to execute a procedure for receiving said access control information from said computers different from said management computer instead of executing the procedure for receiving said volume access control information.

6. A recording medium according to claim 3, wherein a management program is recorded to execute a procedure for receiving said passage control information from said computers different from said management computer instead of executing the procedure for receiving said passage control information.

7. A recording medium according to claim 4, wherein a management program is recorded to further execute a procedure for obtaining said managing person control information from said computers different from said management computer.

8. A management computer connected to computers and to a plurality of storage devices for managing the volumes connected to said computers through a SAN (storage area network), said management computer comprising:

an interface for receiving a notice of fault in the volume from said storage devices and volume access control information for specifying said computers that can access said volumes; and

a control unit for notifying the fault in the volume to said computers permitted to access said volumes based on said volume access control information.

9. A network system comprising computers, storage devices for managing the volumes connected to said computers through a SAN (storage area network), a connection device having a plurality of interfaces connected to said computers and to said storage devices, and a management computer connected to said computers, to said storage devices and to said connection device, wherein:

said storage device has a control unit for controlling the input and output to and from the volumes based on volume access control information for specifying the computers that can access the volumes;

said connection device has a control unit for controlling the input and output of data among said interfaces based on passage control information defining the input and output of data among said interfaces; and

said management computer includes a first interface for receiving a notice of fault in the volume and said volume access control information from said storage devices, a second

interface for receiving said passage control information from said connection device, and a control unit for notifying the fault in the volume to said computers which are permitted to access said volumes based on said volume access control information and said passage access control information.

10. A recording medium recording a management program to be executed by computers, by storage devices for managing the volumes connected to said computers through a SAN (storage area network), by a connection device having a plurality of interfaces connected to said computers and to said storage devices, and by a management computer connected to said computers, to said storage devices and to said connection device, said recording medium being so designed as can be read by said management computer: wherein

    said storage device has a control unit for controlling the input and output to and from the volumes based on volume access control information for specifying the computers that can access the volumes;

    said connection device has a control unit for controlling the input and output of data among said interfaces based on passage control information defining the input and output of data among the interfaces;

    and wherein said management program is recorded in said recording medium and is read by said management computer to execute:

a procedure for receiving a notice of fault in the volume and said volume access control information from said storage devices;

a procedure for receiving said passage control information from said connection device; and

a procedure for notifying the fault in the volume to said computers that are permitted to access the volumes based on said volume access control information and said passage access control information.

11. A recording medium according to claim 10, wherein a management program is recorded to execute a procedure for notifying a fault in the volume to the computers permitted to access the volumes based on said volume access control information, said passage access control information, and managing person control information for specifying said volumes or said computers permitting the management for each of the management IDs for identifying the managing person or the management computer, instead of executing said procedure for notifying the fault.

12. A recording medium according to claim 10, wherein a management program is recorded to execute a procedure for receiving said access control information from said computers different from said management computer instead of executing the procedure for receiving said volume access control information.

13. A recording medium according to claim 10, wherein a management program is recorded to execute a procedure for receiving said access control information from said computers different from said management computer instead of executing the procedure for receiving said passage access control information.

14. A recording medium according to claim 11, wherein a management program is recorded to execute a procedure for receiving said access control information from said computers different from said management computer instead of executing the procedure for receiving said managing person control information.

15. A recording medium recording a management program to be executed by a management computer that is connected to computers and to a plurality of storage devices for managing the volumes connected to said computers through a SAN (storage area network), said recording medium being so designed as can be read by said management computer and recording a management program for executing:

a procedure for receiving information related to the status or performance of the volumes from said storage devices;

a procedure for receiving volume access control information from said plurality of storage devices for specifying said computers that can access said volumes; and

a procedure for notifying information related to the status or performance of the volumes to said computers that are permitted to access the volumes based on said volume access control information.

16. A recording medium recording a management program to be executed by computers, by storage devices for managing the volumes connected to said computers through a SAN (storage area network), by a connection device having a plurality of interfaces connected to said computers and to said storage devices, and by a management computer connected to said computers, to said storage devices and to said connection device, said recording medium being so designed as can be read by said management computer: wherein

    said storage device has a control unit for controlling the input and output to and from the volumes based on volume access control information for specifying the computers that can access the volumes;

    said connection device has a control unit for controlling the input and output of data among said interfaces based on passage control information defining the input and output of data among the interfaces;

    and wherein said management program is recorded in said recording medium and is read by said management computer to execute:

        a procedure for receiving information related to the

status or performance of the volumes and said volume access control information from said storage devices;

a procedure for receiving said passage control information from said connection device; and

a procedure for notifying information related to the status or performance of the volumes to said computers that are permitted to access the volumes based on said volume access control information and said passage access control information.

17. A management program to be executed by a management computer that is connected to computers and to a plurality of storage devices for managing the volumes connected to said computers through a SAN (storage area network), said management program executing:

a procedure for receiving information related to the fault in the volumes from said storage devices;

a procedure for receiving volume access control information from said plurality of storage devices for specifying said computers that can access said volumes; and

a procedure for notifying the fault in the volumes to said computers that are permitted to access the volumes based on said volume access control information.

18. A management program to be executed by computers, by storage devices for managing the volumes connected to said computers through a SAN (storage area network), by a

connection device having a plurality of interfaces connected to said computers and to said storage devices, and by a management computer connected to said computers, to said storage devices and to said connection device: wherein

    said storage device has a control unit for controlling the input and output to and from the volumes based on volume access control information for specifying the computers that can access the volumes;

    said connection device has a control unit for controlling the input and output of data among said interfaces based on passage control information defining the input and output of data among the interfaces;

    and wherein said management program is read by said management computer to execute:

        a procedure for receiving the notice of fault in the volumes and said volume access control information from said storage devices;

        a procedure for receiving said passage control information from said connection device; and

        a procedure for notifying the fault in the volumes to said computers that are permitted to access the volumes based on said volume access control information and said passage access control information.

19. A management program to be executed by a management computer that is connected to computers and to a plurality of

storage devices for managing the volumes connected to said computers through a SAN (storage area network), said management program executing:

    a procedure for receiving information related to the status or performance of the volumes from said storage devices;

    a procedure for receiving volume access control information from said plurality of storage devices for specifying said computers that can access said volumes; and

    a procedure for notifying information related to the status or performance of the volumes to said computers that are permitted to access the volumes based on said volume access control information.

20. A management program to be executed by computers, by storage devices for managing the volumes connected to said computers through a SAN (storage area network), by a connection device having a plurality of interfaces connected to said computers and to said storage devices, and by a management computer connected to said computers, to said storage devices and to said connection device: wherein

    said storage device has a control unit for controlling the input and output to and from the volumes based on volume access control information for specifying the computers that can access the volumes;

    said connection device has a control unit for

controlling the input and output of data among said interfaces based on passage control information defining the input and output of data among the interfaces;

and wherein said management program is read by said management computer to execute:

a procedure for receiving information related to the status or performance of the volumes and said volume access control information from said storage devices;

a procedure for receiving said passage control information from said connection device; and

a procedure for notifying information related to the status or performance of the volumes to said computers that are permitted to access the volumes based on said volume access control information and said passage access control information.